

REMARKS

Reconsideration and further examination of the subject patent application in light of the present Amendment and Remarks is respectfully requested.

Claims 1-12, 36-39 and 54-62 are currently pending in the application. Claims 1-12 and 36-39 stand rejected. Claims 54-62 have been allowed.

Objections to the Specification

FIGs. 1-6 have objected to as showing the prior art. In response, replacement sheets for FIGs. 1-6 are included with this Response.

Figures 6a-b, 7a-b, and 8a-c have been objected to as not being described in the Brief Description of the Drawings. The specification has been amended accordingly.

Rejection Under 35 U.S.C. §103(a)

Claims 1-12 stand rejected under 35 U.S.C. §103(a) as being obvious over U.S. Pat. No. 5,896,452 to Yip et al. in view of U.S. Pat. No. 6,226,331 to Gambuzza. Applicant respectfully traverses this rejection.

The Examiner asserts that “Yip et al discloses . . . when the transmitter is not coupled to the transmission line interface, the transceiver inherently presents a high impedance to the transmission line with respect to the normal line impedance of the transmission line because the transmitter then acts as an open circuit” (Office Action of 5/24/05, page 3). However Yip et al. fails to provide any such teaching or suggestion. In fact, a close reading of Yip et al. reveals that Yip et al. teaches exactly the opposite.

For example, Yip et al. explicitly states with regard to the Yip et al. invention that “What is . . . needed are an apparatus and method for canceling reflected signals that takes into account the characteristics of the connection to the PSTN” (Yip et al., col. 1, lines 46-48). Further, “in order for hybrid 12 to eliminate the effects of echo, the hybrid must match to the precise impedance of the two-wire line” (Yip et al., col. 2, lines 63-65).

In order to cancel echos caused by minor mismatches between the hybrid 12 and two-wire line, Yip et al. uses a training mode to measure an echo. The training mode “includes controller 22 for generating and applying the training signals during the training mode” (Yip et al., col. 3, lines 34-36). The application of the training signals would necessarily occur through the switch 20 with the TRANSMIT PATH disconnected. Further, “At completion of the training mode, switching element 20 switches out controller 22 and connects the transmit path of the four-wire line system to hybrid 12 allowing for voice communication” (Yip et al., col. 4, lines 7-10). During the communication mode “the delay provided by delay element 14 desirably remains fixed and the filter coefficients provided by adaptive filter remain constant” (Yip et al., col. 4, lines 12-14).

In order for the Yip et al. echo canceller 10 to reliably calculate echo coefficients, the impedance of the two-wire circuit would also necessarily remain constant between training and communication modes. As such, the impedance of the TRANSMIT PATH would necessarily be equal to the impedance of the controller 22 and the echo canceller 10 would necessarily have the same impedance in either position of the switch 20. Since the impedances of the TRANSMIT PATH and controller 22 are the same, Yip et al. does not meet the claim limitation “wherein the high speed communication transceiver presents a high impedance to the transmission line with respect to the normal line impedance when the transmitter is not coupled to the transmission line interface, and the

high speed communication transceiver present an impedance to the transmission line that is substantially equal to the normal line impedance when the transmitter is coupled to the transmission line interface”. Similarly, and as admitted by the Examiner, Gambuzza also fails to meet this limitation.

As such, the combination of Yip et al. and Gambuzza fail to teach or suggest each and every claim limitation. Since the combination fails to teach or suggest each and every claim limitation, the rejections of claims 1-12 are improper and should be withdrawn.

Claims 36-39 have been rejected under 35 U.S.C. §103(a) as being obvious over Yip et al. in view of Gambuzza and U.S. Pat. No. 6,324,167 to Starr. Applicant respectfully traverses these rejections.

It may be noted in this regard that Starr (as with Yip et al. and Gambuzza) fail to provide any teaching or suggestion of “A high speed communication transceiver . . . “wherein the high speed communication transceiver presents a high impedance to the transmission line with respect to the normal line impedance when the transmitter is not coupled to the transmission line interface, and the high speed communication transceiver present an impedance to the transmission line that is substantially equal to the normal line impedance when the transmitter is coupled to the transmission line interface”. Since Starr fails to meet this claim limitation, the combination fails to teach or suggest each and every claim limitation. Since the combination fails to teach or suggest each and every claim limitation, the rejections of claims 36-39 are improper and should be withdrawn.

Closing Remarks

For the foregoing reasons, applicant submits that the subject application is in condition for

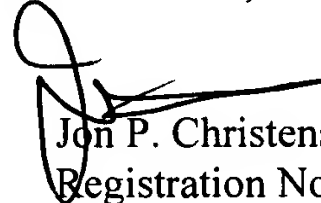
allowance and earnestly solicits an early Notice of Allowance. Should the Primary Examiner be of the opinion that a telephone conference would expedite prosecution of the subject application, the Primary Examiner is respectfully requested to call the undersigned at the below-listed number.

The Commissioner is hereby authorized to charge any additional fee which may be required for this application under 37 C.F.R. §§ 1.16-1.18, including but not limited to the issue fee, or credit any overpayment, to Deposit Account No. 23-0920. Should no proper amount be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal, or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 23-0920. A duplicate copy of this sheet(s) is enclosed.

Respectfully submitted,

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